Work-related training

Matt Hurst

ifelong learning has become a virtual career necessity. In nearly all industries, technological change is placing an ever-higher value on skills. This often requires some kind of training, whether it be learning to run a machine processing oil sands or to use software analyzing investments.

Not all pressures to train come from the employer-employees have their own objectives and motivations to pursue job-related training. The motivation may be to keep a job, get a promotion, or land a position with another employer. It is also linked to higher income (Hum and Simpson 2001, Lynch 1997). For example, an electrical engineer may take a course in a new computer system for power consumption management to gain increased responsibilities, an improved résumé, and hopefully a promotion. Non-economic reasons such as intellectual challenge or the excitement of learning something new also come into play.

Using the Adult Education and Training Survey (AETS), this article looks at how participation in job-related courses changed from 1993 to 2002 across a number of social and demographic characteristics. In particular, the factors

affecting employer-supported training as well as training that is not employer supported are explored. Tabulations are complemented by a multivariate analysis (see Data source and definitions).

More training in the new millennium

Overall, participation in job-related course training increased from 1993 to 2002. Although participation rates fell by 3 percentage points from 1993 to 1997 (from 26% to 23%), they rebounded strongly in 2002, reaching 31% (Table 1). One Canadian study looking at both course and pro-

gram training, using the AETS, found a similar trend (Xu and Lin 2007). The increase in training at the turn of the millennium was also found in American studies of work-related training courses. In the United States, rates remained about the same at 22% and 23% between 1995 and 1999 (Creighton and Hudson 2002), then jumped to 27% in 2004/2005 (O'Donnell and Chapman 2006).

Employer support makes a difference

Job-related training is fairly common. Almost one-third of workers (about 3.9 million) took

Table 1 Participation in training courses by employed Canadians

	1993	1997	2002
		%	
Participation rate			
Total ¹	26	23(*)	31(*)
Employer support	23*	21*(*)	23*
No employer support (ref)	4	3(*)	10(*)
Courses per trainee		average	
Total	1.6	1.3(*)	2.0(*)
Employer support	1.6	1.3(*)	2.0(*)
No employer support	1.4	1.3	2.2(*)
Duration of all training courses		hours	
Total	45	43	57(*)
Employer support	40*	38*	56*(*)
No employer support (ref)	80	80	73

^{*} significantly different from the reference category (ref) [p < 0.05] (*) significantly different from the 1993 figures (p < 0.05)

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^{1.} Columns do not add to totals because of a small group of people who took one or more employer supported courses and one or more courses not supported by the employer. Source: Statistics Canada, Adult Education and Training Survey.

Data source and definitions

The Adult Education and Training Survey¹ was conducted in 1994, 1998 and 2003 as a supplement to the Labour Force Survey (LFS) and asked about education and training activities in the previous year. The analysis was restricted to employed persons aged 25 to 64, yielding samples of about 19,500 for 1993, 16,200 for 1997, and 17,400 for 2002. Employed persons are people who had a job, including working students and the self-employed, in the week preceding the LFS interview. The sample is representative of Canada's 10 provinces, excluding persons living on Indian reserves, full-time members of the Armed Forces, and people in institutions.

This article is about people who take job-related course training. Job-related courses are any learning activity given through a course, workshop, seminar or tutorial. Self-directed learning is not included. No limits were placed on course length. A course was considered job-related if it was taken for a current or future job, rather than for personal interest or other reasons.

Program and course training participation rates differed across a number of important characteristics, but resource constraints precluded an analysis of both. Course training was chosen because it is the larger contributor to the overall participation rate. For example, in 2002, 86% of participants took one or more courses. The analysis excludes programs leading to a degree, certificate or diploma from accredited high schools, registered apprenticeship and trade or vocational institutions, colleges or CEGEPs, and universities. Courses taken for hobbies or personal development are also excluded.

job-related courses in 2002, the majority employer supported. Employer support included providing training, paying for fees or transportation and providing flexible work schedules. Between 1993 and 2002, the participation rate for those taking employer-supported training remained steady at 23%. A study using the Workplace and Employee Survey, with a much shorter time span (1999 and 2001), had similar findings (Xu and Lin 2007). However, a small but growing group of people take courses with no employer support. The participation rate of that group more than doubled, from 4% to 10% from 1993 to 2002.

Although respondents were working at the time of the survey, some did not work in the reference year. In 1997, about 3% who had taken training without employer support had not worked that year. In 2002, this figure remained unchanged. This factor does not account for the increase in training without employer support.

The 1994 and 1998 surveys covered all training activities and asked whether they were job-related, but the 2003 survey asked only about job-related training. The effect of this change on the ability to compare mean participation rates from 2002 with earlier years is not known. However, the conclusions of this study are based on regression model results, which are not sensitive to the survey change in 2002.

For 1997 and 1993, employees were asked if employers "provide the training, pay for courses or transportation, give time off, or give support in any other way." For 2002, the main question used to identify an employer-supported course was whether the employer was "providing or paying for the training, allowing a flexible work schedule, providing transportation, or any other type of support." The latter version may have prompted more respondents to say their training was employer-supported since the concept of a flexible work schedule is broader than giving time off. For this reason, the 2002 participation rate for training without employer support may be underestimated.

Logistic regression was used to estimate the relationship between training participation and personal and job characteristics. The dependent variable is binary—equal to one for those who took at least one training course and zero for those who took none. An odds ratio for a particular group may be interpreted as how many times higher (or lower, if less than 1) their odds of participation are than that of the reference group.

Samples were divided into two groups—those who took training with employer support and those who took it without. Men and women were also considered separately, creating four groups in total.

The growing participation in training without employer support suggests a demand that is not being met by employers. If employers wanted employees trained, then it is likely that they would support training in some way. It appears training without employer support is solely the employee's decision. An employee may wish to self-finance training because its purpose is to obtain general skills applicable to a wide range of occupations. While general-skills training may be good for the employee, the employer may feel it increases the chances that the employee will change jobs, leading to a loss on their investment if they provide funding (Lynch 1997).

Data on training objectives, first seen in the 2003 AETS, support this notion. In 2002, 57% of people who took training with the objective of finding or changing jobs and/or starting their own businesses had employer support, compared with 82% who did not

have this objective. Similarly, 60% of employees seeking change took courses without employer support, whereas only 30% who did not have this objective took courses without support. Therefore the types of courses that help employees switch jobs, and may not be a good investment for the employer, are not given as much support. At the same time, employees appear to take this situation in stride, with only 3% of employees feeling that lack of employer support was a barrier to training.

Training with employer support

Not surprisingly, participation in employer-supported training is related to time spent at work. Full-time employees had higher odds of participation than part-timers (Table 2). For instance, in 2002, women who worked full time had twice the odds of training with employer support. For an employer, the funds invested in training pay off more for employees who work full days. Employers may also be less willing to invest in part-time employees, since these jobs are more likely to be temporary.

Type of work is also an important factor. Blue-collar workers, or those in clerical, sales and service jobs, are less likely to participate in training compared with people in professional or managerial jobs. In 2002, men and women in clerical, sales and service jobs had 0.6 times the odds of participating in employer-supported training compared with those in professional and managerial jobs. The results were very similar in 1993 and 1997.

Employees with longer tenure are more likely to undergo training than those with shorter tenure. For instance, in 2002, women with more than one year of tenure had more than twice the odds of participating in employer-supported training, after accounting for other factors. The opposite might be expected to be true, since a new job usually requires more training. One explanation for this is that employers might prefer to invest in training after the employee has shown loyalty to the firm so that their investment is not lost (Hui and Smith 2005). Another explanation is that new workers are often hired specifically for the skills they bring to the job, whereas longer-tenured workers may need refresher courses.

Employees in large organizations (more than 500 employees) are more likely than those in small ones (fewer than 20) to receive employer-supported training. This is not surprising since larger firms tend to

have more developed and better-financed human resource departments to offer training. Also, employees in large firms have more opportunities to change jobs within their organizations. This lowers the training-investment risk for larger firms (Chowhan 2005).

However, this positive firm-size effect was reduced over time. For women and men, the odds of participating in the employer-supported training were 2.7 and 5.7 times higher in 1993 in large versus small firms, respectively, compared with only 1.8 and 2.2 times in 2002. This is reflected in the convergence of participation rates between small and large firms. From 1993 to 2002, men's participation in employer-supported training in small firms rose by 4 percentage points, while in large firms it dropped 7 points (Table 3). This latter drop is noteworthy since 38% of employed men worked in large firms in 1993, compared with 52% in 2002.

This growing alignment in participation rates for small and large firms might be a result of smaller firms conducting more computer-training courses and larger firms conducting fewer. Larger firms were early to introduce computers as productivity tools for employees. With computers new to the workplace, employees needed training to use them. However, no change was seen in the participation rates for courses taken in data processing and computer science technologies from 1993 to 2002, regardless of firm size.

Since the public sector has always been a staunch supporter of training, it is not surprising that its employees have a training advantage over their private-sector counterparts.²

For 1993 and 1997, not engaging in collective bargaining reduced the odds of participation in course training, but by 2002, no difference was evident.

Personal characteristics are also related to training. Both univariate and multivariate techniques show that 55- to 64-year-olds take less training than workers aged 25 to 34. While health, recreation and fitness courses could be helpful and easily transferable into retirement (Underhill 2006), this would not be the case for training that would be used only at work, such as for specialized software or machinery,.

Higher levels of education are associated with greater participation in employer-supported training—a result confirmed throughout the adult training literature. Furthermore, the effect of higher education for women was larger in 2002 than in 1993. Specifically, women

Table 2 Odds ratios associated with job-related employer-supported training

	Men			Women			
	1993	1997	2002	1993	1997	2002	
	odds ratio						
Age	4.0	4.0	1.0	1.0	1.0	1.0	
25 to 34 (ref)	1.0	1.0	0.9	1.0	1.1	1.2	
35 to 44	1.1	0.9		1.0	1.1	1.1	
45 to 54	0.9	0.9	0.9	0.5*	0.8	0.8(*)	
55 to 64	0.8	0.6*	0.6*	0.5	0.6	0.0	
Less than high school (ref)	1.0	1.0	1.0	1.0	1.0	1.0	
High school graduate	1.5*	1.9*	2.3*(*)	2.1*	2.1*	2.6*	
Postsecondary diploma							
or certificate	2.3*	2.8*	3.3*	2.3*	2.5*	3.9*(*)	
University degree	2.2*	2.7*	2.9*	2.3*	3.1*	5.4*(*)	
No children (ref)	1.0	1.0	1.0	1.0	1.0	1.0	
1 child	1.0	1.1	0.8*	1.4*	1.2	0.8(*)	
2 children	1.2	1.3*	1.1	1.5*	1.1	1.0(*)	
3 or more	1.0	1.3	0.8	1.1	1.2	0.9	
N	1.0	1.0	1.0	1.0	1.0	1.0	
No spouse (ref) Spouse	1.3*	1.4*	1.3*	1.0	1.0	1.1	
Орошоо					4.0	4.0	
Full-time job (ref)	1.0	1.0	1.0	1.0	1.0	1.0	
Part-time job	0.4*	0.5*	0.5*	0.5*	0.7*(*)	0.5*	
Unionized (ref)	1.0	1.0	1.0	1.0	1.0	1.0	
Non-union	0.7*	0.8*	0.9(*)	0.8*	0.8*	1.0	
Professional and managerial (ref)	1.0	1.0	1.0	1.0	1.0	1.0	
Clerical, sales and service	0.6*	0.7*	0.6*	0.5*	0.6*	0.6*	
Blue collar	0.6*	0.6*	0.6*	0.4*	0.3*	0.4*	
Commenter in interfer	1.0	1.0	1.0	1.0	1.0	1.0	
One year or less in job (ref)			1.5*	2.3*	1.8*	2.1*	
1 to 6 years in job	1.6*	2.3*	1.6*	3.1*	2.4*	2.1*	
6 to 20 years in job	1.8*	2.4*	1.6*	2.7*	2.6*	2.4*	
20 and over	2.0*	2.9*	1.0	2.1	2.0	2.4	
Firm size (employees)					4.0	4.0	
Less than 20 (ref)	1.0	1.0	1.0	1.0	1.0	1.0	
20 to 99	2.1*	1.4*	1.6*	1.3	1.7*	1.3	
100 to 500	2.6*	3.0*	1.7*	2.3*	2.3*	1.7*	
Over 500	5.7*	2.6*(*)	2.2*(*)	2.7*	2.1*	1.8*(*)	
Public sector (ref)	1.0	1.0	1.0	1.0	1.0	1.0	
Private sector	0.7*	0.7*	0.6*	0.6*	0.8	0.6	
Newfoundland and Labrador	0.8	0.7	1.0	0.6*	0.7	0.9	
Prince Edward Island	1.0	1.2	1.3	1.9*	1.1	1.0(*)	
Nova Scotia	1.1	1.4*	1.3	0.9	1.2	1.7*(*)	
New Brunswick	1.0	0.7	1.5*(*)	0.6*	0.7	1.2(*)	
	0.7*	0.5*	1.1(*)	0.6*	0.5*	1.0(*)	
Quebec Ontario (ref)	1.0	1.0	1.0	1.0	1.0	1.0	
	1.2	0.9	1.3	1.2	1.1	1.2	
Manitoba	1.2	1.5*	1.5*	1.2	1.2	1.2	
Saskatchewan						1.2	
					0.00	1.4*	
Alberta British Columbia	1.0	1.0 1.1	1.2	1.5* 1.4*	1.2 1.1		

^{*} significantly different from the reference category (ref) [p < 0.05] (*) significantly different from the 1993 figures (p < 0.05) Source: Statistics Canada, Adult Education and Training Survey.

Table 3 Participation in employer-supported training

	Men			Women		
	1993	1997	2002	1993	1997	2002
				%		
Total	23	20(*)	22	23	22	25(*)
25 to 34 (ref)	21	18(*)	24	22	21	26
35 to 44	26*	21*(*)	24	26*	24	26
45 to 54	24	23*	22	24	24	27
55 to 64	15*	13*	14*	11*	13*	18*(*)
Less than high school (ref)	10	8	7(*)	7	7	6
High school graduate	19*	17*	18*	21*	18*	17*
Postsecondary diploma						
or certificate	27*	22*(*)	25*	25*	24*	28*(*)
University degree	34*	29*(*)	29*(*)	33*	33*	40*(*)
No children (ref)	20	16(*)	21	20	21	27(*)
1 child	22	21*	20	25*	24	24
2 children	27*	24*	26*	27*	23(*)	25
3 or more	23	24*	20	20	22	21*
No service (set)	19	14(*)	20	23	22	26(*)
No spouse (ref) Spouse	24*	22*	23	23	22	25
	-					
Full-time job (ref)	23	21(*)	23	26	24	29(*)
Part-time job	6*E	9∗∈	9.€	13*	15*	15*
Unionized (ref)	27	24(*)	30	30	28	38(*)
Non-union	22*	21	25*(*)	19*	22*	24*(*)
Professional and managerial (ref)	34	29(*)	29(*)	34	32	35
Clerical, sales and service	19*	16*	20*	16*	16*	17*
Blue collar	16*	14*	15*	8*	7*∈	10*
One year or less in job (ref)	12	10	16(*)	10	12	14(*)
1 to 6 years in job	21*	19*	23*	21*	21*	26*(*)
	26*	23*(*)	23*(*)	29*	26*	27*
6 to 20 years in job 20 and over	27*	23*	22*	24*	27*	34*(*)
Firm size (employees) Less than 20 (ref)	10	10	14(*)	12	12	17(*)
20 to 99	19*	15*	22*	18*	22*	22*
100 to 500	23*	27*	26*	29*	28*	31*
Over 500	39*	27*(*)	32*(*)	33*	29*(*)	34*
Drivate sector (vol)	19	17(*)	18	16	17	17
Private sector (ref) Public sector	34*	32*	37*	32*	31*	37*(*)
		400		40	470	04
Newfoundland and Labrador	20	16*	22	18	17*	24
Prince Edward Island	21	17	22	36*	24(*)	27
Nova Scotia	25	26	24	22	27	34*(*)
New Brunswick	23	18*	27*	16*	19*	28(*)
Quebec	19*	13*(*)	22	16*	14*	25(*)
Ontario (ref)	24	22	21	24	24	24
Manitoba	24	21	24	25	22	28
Saskatchewan	25	25	24	24	26	29*
Alberta	24	21	23	27	26	25
British Columbia	25	21	22	27	24	28

 $^{^{\}circ}$ significantly different from the reference category (ref) [p < 0.05] $^{(\circ)}$ significantly different from the 1993 figures (p < 0.05) Source: Statistics Canada, Adult Education and Training Survey.

who had a university degree had 2.3 times the odds of participating compared with those who did not finish high school in 1993, whereas, in 2002, the odds ratio was 5.4. So, having a better education had a larger positive effect in 2002 than in 1993 on the odds of training.

In 1993, having one or two children improved the odds of training for women. In 2002, having children had no effect.

In 1993, women in Newfoundland and Labrador, New Brunswick and Quebec had lower odds of participation in employer-supported training than women in Ontario. In Prince Edward Island, Alberta and British Columbia, their odds were higher.

Comparing 2002 and 1993 results for women, the odds of participation in several provinces changed to the point where they were the same as the Ontario benchmark. For Prince Edward Island, the odds fell from 1.9 times relative to those in Ontario in 1993 to 1.0 in 2002 (meaning the odds of participation were the same in both provinces). For New Brunswick and Quebec, the odds ratios increased to the Ontario level over the same period. In 2002, women in Nova Scotia and British Columbia had higher odds of participation than in Ontario.

In 1993, living in Quebec reduced men's odds of participation relative to Ontario. However, by 2002, this difference disappeared. Also in 2002, men in New Brunswick and Saskatchewan had higher odds of training than men in Ontario.

Training without employer support

As mentioned earlier, the participation rate for training without employer support is much lower than for training with employer support. Most people reported only one type of training (with employer support or without employer support)—rarely both (less than 1% in 1993, and only 2.5% in 2002).

Tenure is an important factor for those who undertake training activities on their own. Having more than one year of tenure lowers the odds of participation with no employer support for men and women (Table 4). For instance, men in 2002 with six years or more of tenure had two-fifths the odds of those with one year or less. Since less employer-supported training is offered to workers with less than one year of tenure, this suggests a training gap for recent hires.

Many are bridging the gap by taking training without employer support. However, the notion that employers do not supply enough training resources to employees seems unfounded, since only 2% of employees in 2002 with one year of tenure or less thought a lack of employer support was a barrier to training.

Men employed part time in 1993 had much higher probabilities of training without employer support than those with full-time employment. With less job security, part-time workers might be particularly keen to acquire the skills they need to do their jobs well, and therefore participate in training even without employer support. The effect was not seen in 1997 or 2002. This suggests that from 1993 to 2002, the odds of men in full-time jobs training without employer support increased relative to men in part-time positions. The incidence of training without employer support for men increases from 3 percent to 9 percent from 1993 to 2002, and for part-time workers there is no change (Table 5).

Workers in Quebec had lower odds of participating in training without employer support than those in Ontario.

The increase in the incidence of training without employer support from 1993 to 2002 was seen across all characteristics, with no one factor predominating. It is noteworthy that the odds of participating in training without employer support rose for men in full-time jobs from 1993 to 2002 relative to men in part-time employment.

Summary

The rapid change of pace in today's economy demands more skills from workers than ever before. One way to meet the need is by taking training courses (see Courses are vey diverse). From 1993 to 2002, the incidence of employer-supported training remained steady at 23 percent. However, the incidence of taking training without employer support increased from 4 percent to 10 percent over the same period. This suggests that Canadians have seen a clear need to improve their job skills using their own resources. Over this period, men in full-time employment participated more in training without employer support compared with those in part-time employment where participation levels remained the same. In 1993, 1997 and 2002, higher levels of education were associated with

Table 4 Odds ratios associated with training without employer support

	Men			Women			
	1993	1997	2002	1993	1997	2002	
	odds ratio						
Age	4.0	1.0	1.0	1.0	1.0	1.0	
25 to 34 (ref)	1.0 1.5	1.3	1.1	1.9*	1.0	1.10	
35 to 44	0.9	1.1	1.2	2.0*	1.4	1.10	
45 to 54	0.3*	0.7	1.2(*)	0.7	0.7	1.2	
55 to 64	0.3	0.7	1.2.	0.7	•		
ess than high school (ref)	1.0	1.0	1.0	1.0	1.0	1.0	
ligh school graduate	2.5*	4.1*	2.3*	1.3	2.9	1.2	
Postsecondary diploma							
or certificate	3.4*	4.1*	2.5*	2.6*	6.4*	2.4	
University degree	5.5*	7.3*	3.4*	2.8*	5.6*	3.4	
No children (ref)	1.0	1.0	1.0	1.0	1.0	1.0	
1 child	3.3*	0.7(*)	0.7(*)	0.9	0.7	0.9	
	1.8*	0.6(*)	1.0	0.8	1.0	1.1	
2 children 3 or more	1.6	1.0	1.1	0.9	1.1	1.1	
3 of more	1.0	1.0					
No spouse (ref)	1.0	1.0	1.0	1.0	1.0	1.0	
Spouse	0.5	1.3	1.0	1.2	0.6*(*)	0.8	
Full-time job (ref)	1.0	1.0	1.0	1.0	1.0	1.0	
Part-time job (161)	4.2*	1.5	1.6(*)	0.8	1.0	1.1	
11-111 (6)	1.0	1.0	1.0	1.0	1.0	1.0	
Unionized (ref)	0.9	0.8	1.1	1.0	1.6	1.3	
Non-union	0.9	0.0					
Professional and managerial (ref)	1.0	1.0	1.0	1.0	1.0	1.0	
Clerical, sales and service	1.8*	1.6	0.8(*)	1.0	0.6*	0.6	
Blue collar	0.9	1.3	0.8	0.8	1.2	0.7	
One year or less in job (ref)	1.0	1.0	1.0	1.0	1.0	1.0	
1 to 6 years in job	0.4*	0.5*	0.6*	0.4*	0.3*	0.6	
6 to 20 years in job	0.3*	0.5	0.4*	0.3*	0.2*	0.6	
20 and over	0.2*	0.2*	0.4*	0.4*	0.2*	0.7	
Firm sine (smalessee)							
Firm size (employees) Less than 20 (ref)	1.0	1.0	1.0	1.0	1.0	1.0	
20 to 99	1.2	0.8	0.9	1.1	0.8	0.9	
100 to 500	1.4	1.0	1.2	0.9	1.3	1.1	
Over 500	1.2	1.5	1.1	1.0	1.0	1.4	
	4.0	4.0	1.0	1.0	1.0	1.0	
Public sector (ref) Private sector	1.0 1.1	1.0 1.1	0.9	0.8	0.5*	0.8	
Private sector			0.0				
Newfoundland and Labrador	0.9	0.5	1.2	0.4	0.8 1.2	0.7 1.3	
Prince Edward Island	0.5	0.9	1.0	1.2			
Nova Scotia	1.5	1.2	0.9	1.2	0.6	0.7	
New Brunswick	0.6	0.5	0.6	0.4*	0.9	0.6	
Quebec	0.4*	0.3*	0.4*	0.4*	0.2*	0.4	
Ontario (ref)	1.0	1.0	1.0	1.0	1.0	1.0	
Manitoba	0.9	0.6	1.3	0.9	0.6	0.7	
Saskatchewan	0.8	0.4	1.1	0.8	0.5	0.7	
Alberta	1.1	0.8	0.9	1.3	0.8	0.8	
British Columbia	1.2	0.8	1.1	1.4	1.0	1.1	

^{*} significantly different from the reference category (ref) [p < 0.05] (*) significantly different from the 1993 figures (p < 0.05) Source: Statistics Canada, Adult Education and Training Survey.

Table 5 Participation in training without employer support

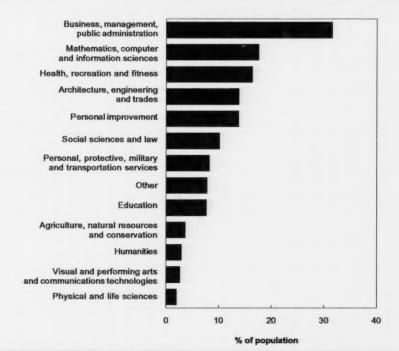
	Men				Women		
	1993	1997	2002	1993	1997	2002	
T-4-1	3	3	9(*)	% 5	3(*)	11(*)	
Total	3	3	34-7	3	3.7	1100	
25 to 34 (ref)	4	3	7(*)	4	4E	10(*)	
35 to 44	4E	2€	9(*)	5*	3(*)	10(*)	
45 to 54	2*	2€	10*(*)	6*	3(*)E	11(*)	
55 to 64	1*E	F	10(*)	2*€	F	11(*)	
Less than high school (ref)	1E	1E	4(*)E	2€	F	4E	
High school graduate	3*E	2*E	7*(*)	3	2 *(*)E	6*(*)	
Postsecondary diploma							
or certificate	4°E	3*	8*(*)	6*	4 *(*)E	11*(*)	
University degree	5*E	4*	15*(*)	7*	5*	17*(*)	
No children (ref)	2	3	9(*)	5	4	11(*)	
1 child	5*€	2(*)E	7	5E	20ME	9(*)	
2 children	3	2€	9(*)	4	3	11(*)	
3 or more	3€	3€	10(*)	5E	4E	11(*)	
No amount (not)	4E	3E	8(*)	5	5E	10(*)	
No spouse (ref)			9(*)	5	3(*)	11(*)	
Spouse	3	2	9	5	3(-)	116.5	
Full-time job (ref)	3	2	9(*)	5	3(*)	10(*)	
Part-time job	12°E	5(*)E	13*	5	4	11(*)	
Unionized (ref)	3	2€	6(*)	5	∆ E	11(*)	
Non-union	4	3	6(*)	5	2 *(*)	7*(*)	
Destanciand and managerial (ref)	3	3	12(*)	6	5	14(*)	
Professional and managerial (ref)	5E	3 3E	8*(*)	4	2*(*)	8*(*)	
Clerical, sales and service	2E	2*€	6*(*)	3*€	F	7*(*)	
Blue collar	2-	Z	0-(-)	3-2	F	1-1-8	
One year or less in job (ref)	7	5E	11	10	7E	11	
1 to 6 years in job	3*€	3*€	9(*)	5*	3 *(*)	10(*)	
6 to 20 years in job	3*	2*E	8(*)	3*	2*	11(*)	
20 and over	1*E	1*E	8*(*)	F	2 €	11	
Firm size (employees)							
Less than 20 (ref)	3E	2€	6(*)	5	2(*)E	6	
20 to 99	4E	2*E	5€	5E	2(*)E	6	
100 to 500	4E	2€	7€	4E	4E	8(*)	
Over 500	3E	3E	6(*)	5	3(*)€	10*(*)	
Drivete easter (ref)	3	3	8(*)	4	2(*)E	8(*)	
Private sector (ref) Public sector	3	2€	11*(*)	6*	5*	13*(*)	
Tubilo socioi		-					
Newfoundland and Labrador	3E	F	12(*)E	F	F	9(*)E	
Prince Edward Island	F	F	10(*)E	6E	5E	14(*)E	
Nova Scotia	5E	3E	10(*)E	6E	F	10	
New Brunswick	F	F	8(*)E	3€	4E	10(*)	
Quebec	1°E	F	6(*)	3*€	1 *E	7*(*)	
Ontario (ref)	3E	3	9(*)	5	4E	12(*)	
Manitoba	3E	2*E	11(*)	4E	3E	9(*)	
Saskatchewan	2 [€]	F	10(*)	5 ^E	3€	11(*)	
Alberta	4E	3E	9(*)	7	4(*)E	11(*)	
British Columbia	4E	4E	11(*)	8E	4E	13(*)	

^{*} significantly different from the reference category (ref) [p < 0.05] $^{(*)}$ significantly different from the 1993 figures (p < 0.05) Source: Statistics Canada, Adult Education and Training Survey.

Courses are very diverse

The concept of a job-related course is fairly broad. In 2002, the most frequently taken courses were in business, management and public administration. This is not surprising since a large portion of those taking courses are in professional or managerial jobs. In second and fourth places were mathematics, computer and information sciences; and architecture, engineering and trades. This likely reflects the importance of computer skills and information technology in the workplace, and the importance of training in the engineering and trades fields. In third and fifth places were health, recreation and fitness; and personal improvement.

In 1993, workers taking training averaged roughly 1.6 courses. This rose to two courses in 2002, and the average duration increased. Courses taken without employer support were about the same duration in both years.



Note: Will not add to 100% because people can take more than one type of course. Source: Statistics Canada, Adult Education and Training Survey, 2002.

higher odds of participation for Canadians who took training without employer support. Also, one year or less of tenure was associated with higher odds of participation.

For those taking training with employer support, a number of key factors also influenced their participation rates. Higher education levels, more than one year of tenure, larger firm size, professional or managerial work, and public-sector employment led to higher odds of training participation for each year examined (1993, 1997 and 2002). For women, the period from 1993 to 2002 saw an increase in the impact of education on participation, which is particularly important given the already large effect of education relative to other factors examined.

Perspectives

■ Notes

- Information in the AETS will now be collected in the Access and Support to Education and Training Survey from Statistics Canada, scheduled to start in 2008.
- Public-sector employees are those in public administration at the federal, provincial and municipal levels, as well as in Crown corporations, liquor control boards and other government institutions such as schools (including universities), hospitals and public libraries.

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